



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

October 19, 2016

Lucas Yockey, Watermaster
Water District 34
PO Box 53
Mackay, ID 83251

Water District 34 Advisory Committee
PO Box 53
Mackay, ID 83251

RE: Water District 34 - Leslie Gage

Dear Gentlemen:

Last month, staff from the Idaho Department of Water Resources ("Department") spoke with Lucas Yockey, Water District 34 ("WD34") Watermaster, regarding on-going and future maintenance of the Big Lost River gage station at Leslie. The Department understands from Lucas that WD34 maintains an interest to assume operation of the Leslie gage as opposed to continuing the contract with Idaho Power whereby WD34 funds two-thirds of the annual contract cost (Department funds one-third of the cost). The Department further understands that Lucas agreed to the Department extending its contract with Idaho Power for the 2017 water year. However, Lucas requested more detail as to what the Department may wish to see in a WD34 measurement plan that transfers operation to the district.

As you may recall, the Department's letter to WD34 dated October 30, 2015, outlined some criteria that WD34 should meet before assuming operation and maintenance of the Leslie gage. Three of those criteria pertaining directly to the operation and maintenance of the gage are outlined below in italics. Below each italicized section are suggestions for what to include in a revised measurement plan.

- *WD34 does not currently possess adequate equipment to safely and accurately measure the range of flows that may be encountered at the Leslie gage during the irrigation season. The District must demonstrate how it will acquire the necessary equipment. Acquisition of equipment may depend on budgets or resolutions approved at future annual water district meetings;*
 - Include in the measurement plan an explanation of the equipment acquired by WD34. Include the StreamPro specifications making sure to document that it has a compass and if it is capable of performing the moving bed test.
 - Explain how measurements will be conducted during high flow conditions when it would otherwise be unsafe to wade (i.e. the use of a pulley system).
- *Even if the District acquires suitable measurement equipment in the next year, the Watermaster will need some time during at least one field season to become fully trained in the use of the equipment and any related software;*

- Submit StreamPro electronic measurement files to the department for review. The measurement files should include files at the Leslie gage but may also include other measurements within WD34.
- Provide a summary of the number of field measurements conducted during 2016 and 2017.
- Provide documentation of any training.
- *The District's plan does not adequately address resources or expertise that will be used to maintain or update a station rating table;*
 - Provide documentation of how rating tables will be established and how shifts will be applied. If using an outside provider, submit documentation of how this service is adhering to USGS standards.
 - Provide copies of any electronic rating tables that you or an outside provider may have developed for any gages in the water district to the Department for review. Rating tables for other Big Lost River gage monitoring locations maintained by you or an outside provider may be submitted to the Department.

The current contract with Idaho Power for stream gaging services expires on September 30, 2017. The process for renewing the contract will begin in August 2017. The Department must make a decision regarding any measurement plan by July 15, 2017. I suggest that WD34 submit to the Department a revised measurement plan no later than July 1, 2017 so that IDWR has time to review and approve a plan by July 15, 2017.

If the Leslie gage is to be removed from the contract, I encourage WD34 to submit any electronic measurement files and rating tables from 2016 to the Department as soon as possible. Department staff will review the files for compliance with USGS stream measurement standards and rating table development. Department staff will provide feedback and suggestions, if any, to Lucas prior to the 2017 irrigation season. This gives Lucas the opportunity to incorporate any suggested changes into his measurements and monitoring prior to submitting a measurement plan.

Finally, we wish to point out that maintaining and operating river gages requires additional expertise beyond what is typically required to maintain measured diversion sites using standard measuring devices or open channel rating sections. None of the other water districts in the state using Department water right accounting programs maintain their own river gage stations. Most water districts don't have the interest, time or expertise necessary to maintain river gages to USGS standards. Additionally, river gage accuracy and continuity is very important for successful operation of water right accounting programs.

Please contact Liz Cresto, Cindy Yenter or Tim Luke at the Department if you have any questions related to this matter.

Respectfully,



Tim Luke
Water Compliance Bureau

cc. Liz Cresto, IDWR
Cindy Yenter, IDWR